

WHAT IS CLAIMED IS:

1. A method for providing a physical service to a user of a device, the method comprising:
accessing a location of the device, the location determined from pseudo-ranges between
the device and a plurality of digital television (DTV) transmitters, the pseudo-
ranges calculated from broadcast DTV signals received by the device from the
DTV transmitters; and
providing a physical service at the location of the device.
2. The method of claim 1 wherein the physical service comprises emergency roadside
assistance.
3. The method of claim 1 wherein the physical service comprises an E-911 service.
4. The method of claim 1 wherein the device is located in one of a plurality of geographic
domains and a quality of the physical service depends on in which geographic domain the device
is located.
5. The method of claim 1 wherein the device is a stationary device.
6. The method of claim 1 wherein providing the physical service comprises:
performing the physical service at the location.
7. The method of claim 1 wherein providing the physical service comprises:
transmitting a key code to the device, the key code authorizing provision of the physical
service at the location.
8. The method of claim 1 wherein providing the physical service comprises:
contacting a local service provider of the physical service; and
authorizing the local service provider to provide the physical service at the location.

9. The method of claim 8 wherein the device is located in one of a plurality of geographic domains and the local service provider depends on in which geographic domain the device is located.
10. The method of claim 1 wherein the DTV signals are American Television Standards Committee (ATSC) signals.
11. The method of claim 1 wherein the DTV signals are European Telecommunications Standards Institute Digital Video Broadcasting - Terrestrial (DVB-T) signals.
12. The method of claim 1 wherein the DTV signals are Japanese Integrated Service Digital Broadcasting-Terrestrial (ISDB-T) signals.
13. A method for providing a service based on a location of a device, the method comprising:
accessing a location of the device, the location determined from pseudo-ranges between
the device and a plurality of digital television (DTV) transmitters, the pseudo-
ranges calculated from broadcast DTV signals received by the device from the
DTV transmitters; and
providing a service according to the location of the device.
14. The method of claim 13 wherein providing the service comprises:
providing information according to the location of the device.
15. The method of claim 13 wherein the device is located in one of a plurality of geographic domains and the service depends on in which geographic domain the device is located.
16. The method of claim 13 wherein the device is stationary.
17. The method of claim 13 wherein the service is provided to a party other than a user of the device.
18. The method of claim 13 wherein providing the service comprises:

the device providing the service.

19. The method of claim 18 wherein accessing the location of the device comprises:
the device calculating the pseudo-ranges from the broadcast DTV signals; and
the device determining the location based on the pseudo-ranges.
20. The method of claim 18 wherein accessing the location of the device comprises:
the device receiving the location from a DTV location server.
21. The method of claim 13 wherein providing the service comprises:
a service provider system providing the service.
22. The method of claim 21 wherein accessing the location of the device comprises:
the service provider system receiving the location from the device.
23. The method of claim 21 wherein accessing the location of the device comprises:
the service provider system receiving the location from a DTV location server.
24. The method of claim 13 wherein providing the service comprises:
a service provider system determining a key code for the service according to the location
of the device, the key code enabling provision of the service; and
the service provider system transmitting the key code to the device.
25. The method of claim 13 wherein providing the service comprises:
contacting a local service provider of the service; and
authorizing the local service provider to provide the service at the location.
26. The method of claim 25 wherein the device is located in one of a plurality of geographic
domains and the local service provider depends on in which geographic domain the device is
located.

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27. The method of claim 13 wherein provision of the service occurs automatically without an explicit request by a user of the device.
28. The method of claim 13 further comprising:
receiving a request for the service; and
providing the service only in response to such a request.
29. The method of claim 13 wherein the DTV signals are American Television Standards Committee (ATSC) signals.
30. The method of claim 13 wherein the DTV signals are European Telecommunications Standards Institute Digital Video Broadcasting - Terrestrial (DVB-T) signals.
31. The method of claim 13 wherein the DTV signals are Japanese Integrated Service Digital Broadcasting-Terrestrial (ISDB-T) signals.
32. An apparatus for providing a service based on a location of a device, the apparatus comprising:
means for accessing a location of the device, the location determined from pseudo-ranges between the device and a plurality of digital television (DTV) transmitters, the pseudo-ranges calculated from broadcast DTV signals received by the device from the DTV transmitters; and
means for providing a service according to the location of the device.
33. The apparatus of claim 32 wherein the device is located in one of a plurality of geographic domains and the service depends on in which geographic domain the device is located.
34. The apparatus of claim 32 wherein the device is stationary.

35. The apparatus of claim 32 wherein the service is provided to a party other than a user of the device.

36. The apparatus of claim 32 wherein the means for providing the service is incorporated into the device.

37. The apparatus of claim 36 wherein the means for accessing the location of the device comprises:

means for calculating the pseudo-ranges from the broadcast DTV signals;

means for determining the location based on the pseudo-ranges; and

wherein the means for calculating the pseudo-ranges and the means for determining the location are incorporated into the device.

38. The apparatus of claim 36 wherein means for accessing the location of the device comprises:

means for receiving the location from a DTV location server, said means incorporated into the device.

39. The apparatus of claim 32 wherein the means for providing the service is incorporated into a service provider system.

40. The apparatus of claim 39 wherein the means for accessing the location of the device comprises:

means for receiving the location, said means incorporated into the service provider system.

41. The apparatus of claim 32 wherein the means for providing the service comprises:
means for determining a key code for the service according to the location of the device,
the key code enabling provision of the service; and
means for transmitting the key code to the device.

42. The apparatus of claim 32 wherein the means for providing the service comprises:
means for contacting a local service provider of the service; and
means for authorizing the local service provider to provide the service at the location.
43. The apparatus of claim 42 wherein the device is located in one of a plurality of geographic domains and the local service provider depends on in which geographic domain the device is located.
44. The apparatus of claim 32 wherein provision of the service occurs automatically without an explicit request by a user of the device.
45. The apparatus of claim 32 wherein provision of the service occurs only in response to a request for the service.
46. The apparatus of claim 32 wherein the DTV signals are American Television Standards Committee (ATSC) signals.
47. The apparatus of claim 32 wherein the DTV signals are European Telecommunications Standards Institute Digital Video Broadcasting - Terrestrial (DVB-T) signals.
48. The apparatus of claim 32 wherein the DTV signals are Japanese Integrated Service Digital Broadcasting-Terrestrial (ISDB-T) signals.
49. An apparatus for enabling a provision of a physical service to a user of a device, the apparatus comprising:
means for accessing a location of the device, the location determined from pseudo-ranges between the device and a plurality of digital television (DTV) transmitters, the pseudo-ranges calculated from broadcast DTV signals received by the device from the DTV transmitters; and
means for enabling provision of a physical service at the location of the device.

50. The apparatus of claim 49 wherein the physical service comprises emergency roadside assistance.
51. The apparatus of claim 49 wherein the physical service comprises an E-911 service.
52. The apparatus of claim 49 wherein the means for enabling provision of the physical service comprises:
- means for delivering the physical service to the location.
53. The apparatus of claim 49 wherein the means for enabling provision of the physical service comprises:
- means for transmitting a key code to the device, the key code authorizing provision of the physical service at the location.
54. The apparatus of claim 49 wherein the means for enabling provision of the physical service comprises:
- means for contacting a local service provider of the physical service; and
- means for authorizing the local service provider to provide the physical service at the location.
55. The apparatus of claim 54 wherein the device is located in one of a plurality of geographic domains and the local service provider depends on in which geographic domain the device is located.
56. A system for providing a service based on a location of a device, the system comprising:
a device for receiving broadcast DTV signals from a plurality of DTV transmitters and
calculating pseudo-ranges from the received DTV signals;
a DTV location server for determining a location of the device from the pseudo-ranges;
and
a service provider system for providing a service according to the location of the device.

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57. The method of claim 56 wherein the device serves as the service provider system by providing the service.

58. The method of claim 56 wherein:

the device serves as the DTV location server by determining the location from the pseudo-ranges; and

the device serves as the service provider system by providing the service.

59. The method of claim 56 wherein

the device serves as the DTV location server by determining the location from the pseudo-ranges.

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